## ADE IT Modernization Effort Update



Presented to:

Arizona Ready IT Work Group September 28, 2012

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#### Agenda

- Data Governance
- SLDS Dashboard Pilot
- Quarterly Progress Report
- Responding to Your Recommendations
- Team Roles and Expectations
- Next Steps



#### 2013 Approach

- Focus on Data Governance policies
- Leverage other state lessons learned
- Fast-track deployment of Arizona Education Data Driven Decision System (ED<sup>3</sup>S) December 2012
- Begin Phase I Development SAIS Replacement System
  - School Finance
  - Statewide Student ID
- Begin transformation of ADE Systems (Enterprise Architecture)
  - On Line Certification, Grants Management, Great Plains Phase II, ESS, Enterprise, LEA Calendar, Events Management, Network and Operations
- Deliver Instruction Improvement System to support Common Core





# THE NEED FOR DATA GOVERNANCE



## **ADE IT team visit to Georgia**

- Why Georgia?
  - SLDS already deployed
  - History to learn from
    - Highly qualified resources already in place
    - Systems working
    - Existing, structured Data Governance
    - Started Accountability system at same time as Arizona but took different path
- Demo of Dashboards



#### FY2012 Lessons learned

- Enterprise Architecture
  - Stovepipe program areas resulting in stovepipe applications
  - Large enough sample size to confirm action plan
  - Desire to change vs. Will to change
  - Team redeployed to support existing and newly-initiated projects
- SAIS Functional User Requirements
  - Focus on documenting customer requirements
  - Need for data governance policy



#### Takeaways from visit to Georgia

- Will fast-track deployment of SLDS December 2012
  - Capture how Georgia SLDS works
  - Modify and make useful to Arizona
- Identified ADE Challenges
  - Need for data governance policies
  - Structured approach starting at agency
- Need to reorganize project resources
  - Integrate EA and IMS into existing projects



#### **Need for policies**

- Lack of internal data governance policies and structure
  - Master Data Management
  - Uniform data collection practices
  - Ensure compliance with privacy and security policies
- Agency data governance
  - Chief Technology Officer
  - Data Officer
  - ADE internal data governance board
- AELAS data governance
  - AZ Ready IT Task Force
  - Board of Education
  - Data Governance Commission











Level 1: Integration

Level 2: Reporting

Level 3: Analysis

Level 4: Education Intelligence



- Achievement Tracking
- Personalized Learning Plans
- Adaptive Content

- ▶ Longitudinal Data Warehouse
- ▶ Academic Analyzer

- ► Educator Collaboration
- ► Community Engagement

- ► Student Profile & Progress Tracking
- ► Student Engagement

- User Ratings& Approval
  - ► Content Pacing Plans

- ▶ Data Integration
- ▶ Reporting

▶ Identity Management

- ► Intervention Case Management
- ▶ Entity Relationships

- ► Competency Definitions
  - ► Content mapped to Standards

Data Analytics



Information Access



Student Success Management



Standards & Curriculum



## Az ED<sup>3</sup>S Maturity Levels Defined

1

2

3

4

Integration

Reporting

**Analytics** 

**Education Intelligence** 

Identity, content, data and process

Community wide access

Everyone tracking to same the goals

Next Generation Learning



#### **Data hierarchy of needs**

Education Intelligence

Analytics

Reporting

Integration



## **State Longitudinal Data System**

Improve Student Achievement and Graduation Rates

Support the
Increasing
Demands for Data
and
Information(P20W)

SLDS

Goals

Improve State,
District, School and
Educator
Performance

Program and Policy
Decisions and Best
Practices



#### **State Longitudinal Data System**

Create a State-wide Longitudinal Data System which provides Secure, Accurate, Accessible and Actionable education information to Legislators, Administrators, Teachers, Students and Parents.

**SLDS** 

Data Governance – Accurate Data

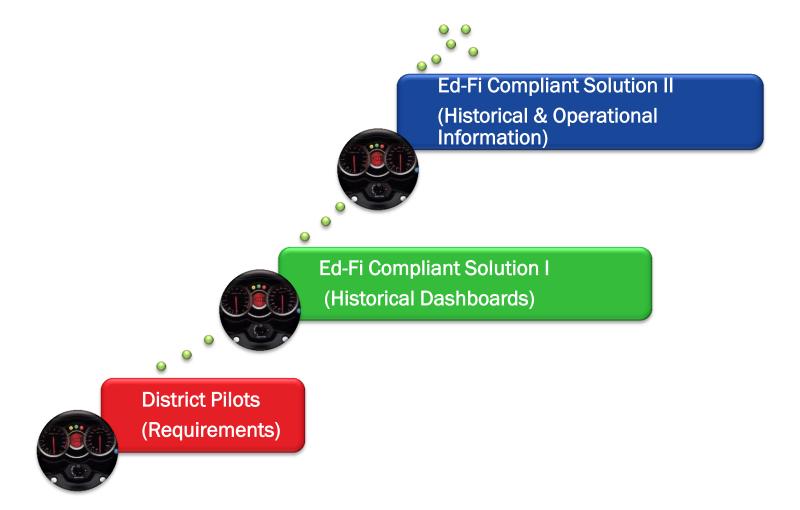
## Objectives

Online Dashboards and Reports – Accessible and Actionable

SAML and AFDS based authentication and authorization solution - Secure

EDFI Compliant ODS – Accurate and Actionable





#### **District Pilots**

(Requirements Gathering)

- Vail School District
  - Mid-November Mid December
- One 5<sup>th</sup> grade class
  - 5 Dashboards from Georgia model
  - Historical information only
  - Assessments
  - Attendance
  - Enrollments and withdrawals
  - Additional pilots
    - January thru February



# Ed-Fi Compliant Solution I

(Historical Dashboards)

- September 2012 Summer 2013
- Planning and preparation started
- Data Governance
- Map ADE data to Ed-Fi model
- Build SAML based authentication and authorization
- Use Ed-Fi pre-built dashboards to meet requirements
- Rollout schedule TBD



# Ed-Fi Compliant Solution II

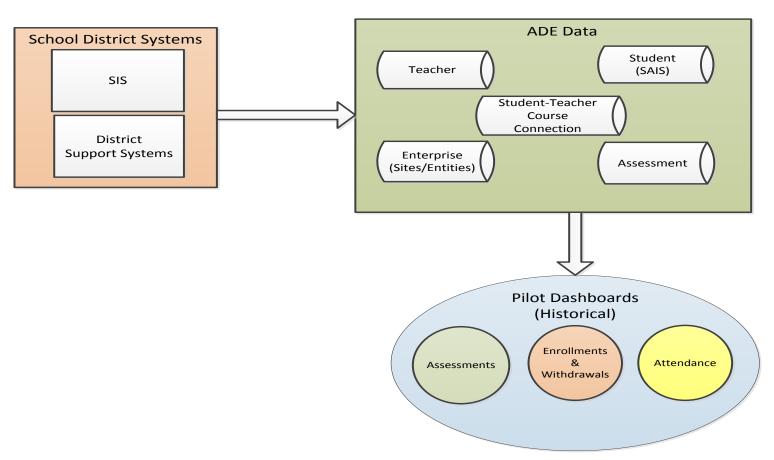
(Operational and Historical Information)

- September 2012-Summer 2014
- Planning and preparation started
- Data Governance
- Build near-time Ed-Fi compliant xml extractors in SIS
- Develop additional dashboards and reports for operational use
- Foundational platform for Educational Intelligence and Analytics
- Rollout schedule TBD



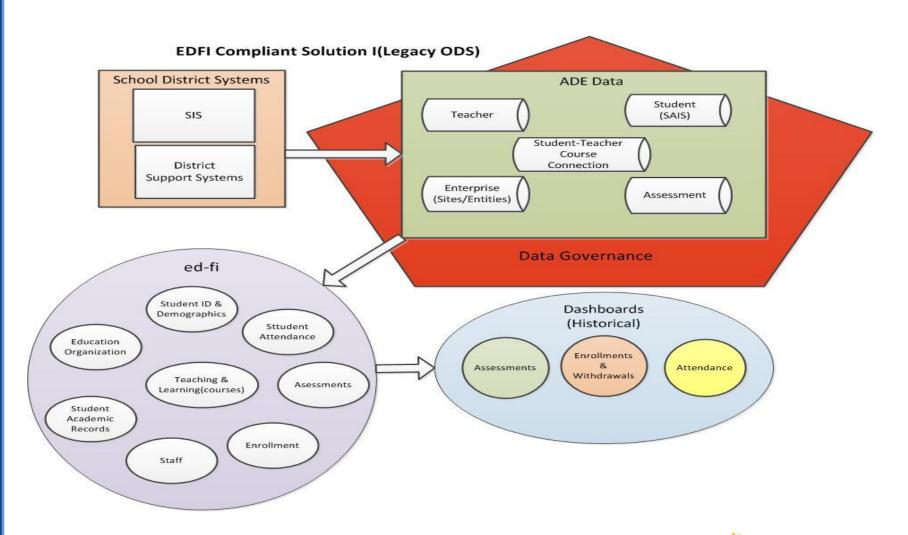
#### **SLDS Technical Roadmap**

#### **SLDS District Pilots Project(Requirements)**



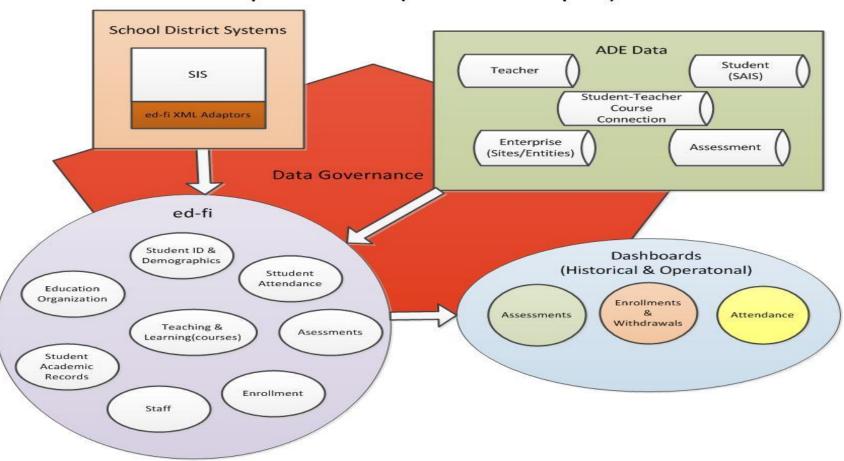


## **SLDS Technical Roadmap**



## **SLDS Technical Roadmap**

#### **EDFI Compliant Solution II(SIS EDFI XML Adaptors)**



## **SLDS Functional Roadmap**



- Demographics
- Schedule/Calendar
- Enrollments
- Graduation Rate
- Dropout Rate
- School Performance

#### **Student Visualization**

- Demographics
- Program & Needs
- Attendance
- Assessments
- Student Transcripts
- Student Growth
- College Readiness

#### Teacher Visualization

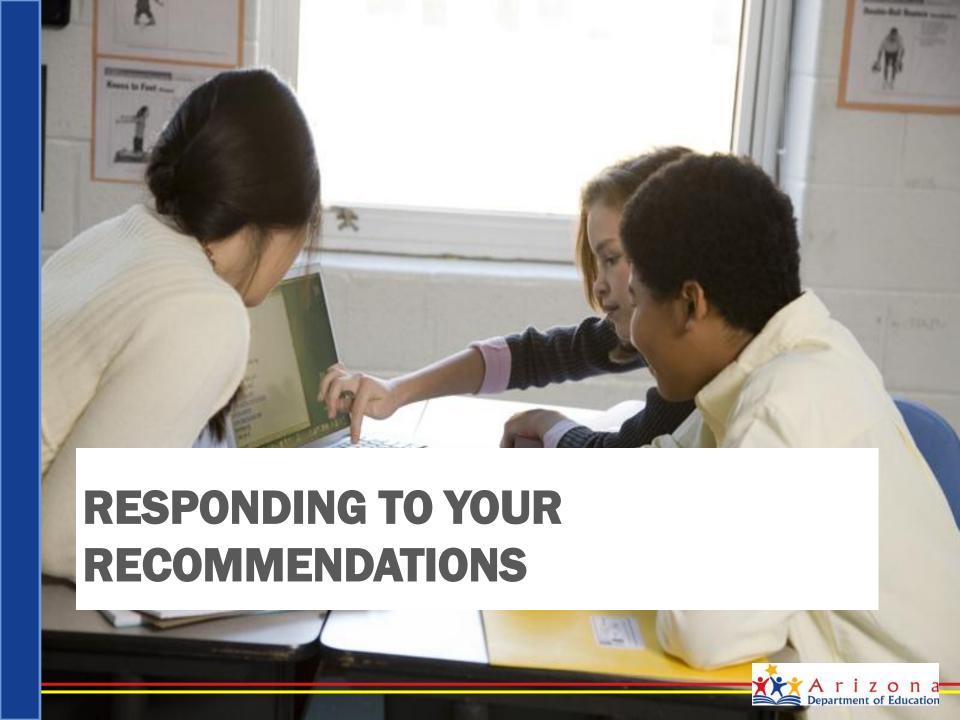
- Teacher Assessments
- Student- Teacher connection for courses taken



#### **Quarterly Progress Report**

- For FY2013 report quarterly on progress in implementing the Education Learning and Accountability System and other related projects
- Report to Legislative leadership, Governor's Office, Joint Legislative Budget Committee
- Shall include an assessment of progress from an independent third party that is not affiliated with state government
- Recommended: Tangible outcomes for the quarter





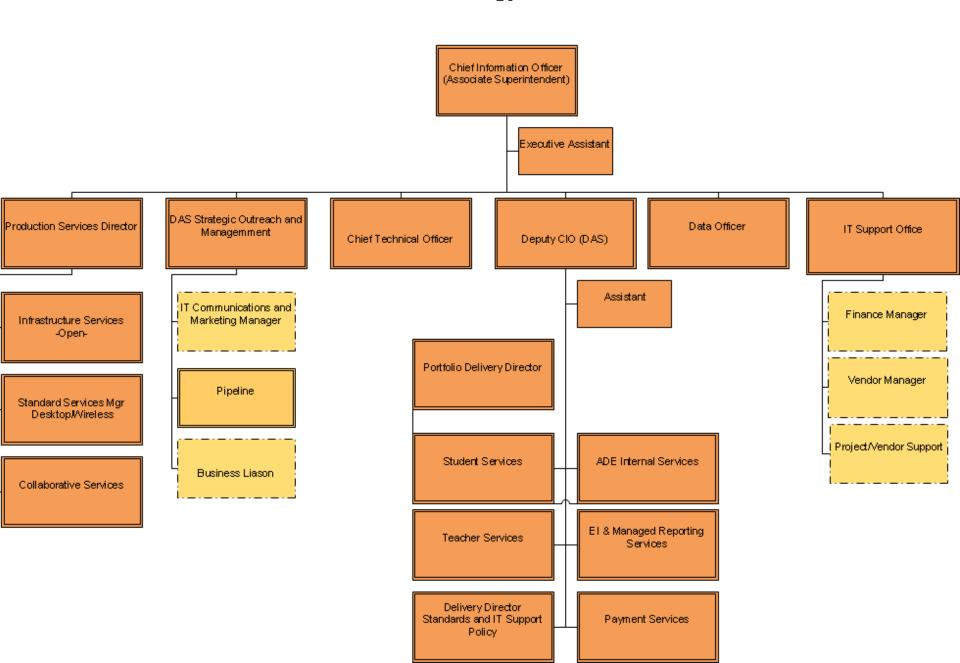
#### Responding to your recommendations

Portfolio Management

- Organization
  - Delivery-based organization



## Arizona Department of Education Information Technology Division



#### Overall build out philosophy

Buy, build, partner?

Bound by state procurement laws

What will stay in house

- National consortiums
  - Strategic use of limited funds
  - Link to larger data sources



#### **Discussion**

- Team roles and expectations
  - ADE IT ideas
    - Validation for government following industry acceptable best practices
    - Third-party reviewer for Quarterly report
  - Work Group ideas



#### **Thank You**



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